Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Re-written, Broken Up	Quality Standard Rule #	Reason for Proposed Change
Represent and solve problems involving multiplication and division.	3.OA.1	3.OA.6 Understand division as an unknown-factor problem.	Keep			
Represent and solve problems involving multiplication and division.	3.OA.2	3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each.	Keep			
Represent and solve problems involving multiplication and division.	3.OA.3	3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Keep			
Represent and solve problems involving multiplication and division.	3.OA.4	3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	Keep			

Understand properties of multiplication and the relationship between multiplication and division.	3.OA.5	3.OA.5 Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.)	Keep			
Understand properties of multiplication and the relationship between multiplication and division.	3.OA.6	3.OA.6 Understand division as an unknown-factor problem. For example, find 32/8 by finding the number that makes 32 when multiplied by 8.	Keep			
Multiply and divide within 100.	3.OA.7	3.OA.7a. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. 3.OA.7b.~~By the end of Grade 3, know from memory, all products of two one-digit numbers.~~ **Demonstrate fluency for all products of two one-digit numbers.**	Propose change	Re-written	#1	We believe third graders need more time to develop their multiplication understanding. They would work on strategies for all factors, but would need to know from memory all products of two one-digit numbers by the end of fourth grade.

Solve problems involving the four operations, and identify and explain patterns in arithmetic.	3.OA.8	3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order [Order of Operations].)	Keep			
Solve problems involving the four operations, and identify and explain patterns in arithmetic.	3.OA.9	3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	Keep			
Use place value understanding and properties of operations to perform multi-digit arithmetic. (A range of algorithms may be used)	3.NBT.1	3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	Keep			

Use place value understanding and properties of operations to perform multi-digit arithmetic. (A range of algorithms may be used)	3.NBT.2	3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Keep			
Use place value understanding and properties of operations to perform multi-digit arithmetic. (A range of algorithms may be used)	3.NBT.3	3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	Keep			
Develop understanding of fractions as numbers.	3.NF.1	3.NF.1 Understand a fraction 1/b as the quantity formed by 1 part when a whole is partitioned into b equal parts **(example: 1 part out of 4 equal parts is the same as 1/4)**; understand a fraction a/b as the quantity formed by a parts of size 1/b. **(example:3/4 is the same as 3 one-fourths (1/4, 1/4, 1/4)**	Change			.add examples.

Develop understanding of fractions as numbers.	3.NF.2	3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. 2a. Represent a fraction 1/b on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size 1/b and that the endpoint of the part based at 0 locates the number 1/b on the number line. 2b. Represent a fraction a/b on a number line diagram by marking off a lengths 1/b from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.	Keep			
Develop understanding of fractions as numbers.	3.NF.3	3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. 3a.Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. 3b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3. Explain why the fractions are equivalent, e.g., by using a visual fraction model. 3c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. 3d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols , =, or	Keep			

Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	3.MD.1	3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes, **using an analog and digital clock.** Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	Change	re-written	1	keep wording consistent with grades 1 & 2.
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	3.MD.2	3.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). (Excludes compound units such as cm3 and finding the geometric volume of a container.) Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. (Excludes multiplicative comparison problems [problems involving notions of “times as much”; see Glossary, Table 2])	Keep			
Represent and interpret data.	3.MD.3	3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.	keep			
Represent and interpret data.	3.MD.4	3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.	keep			

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	3.MD.5	3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement. 5a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. 5b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.	Keep			
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	3.MD.6	3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	Keep			

Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	3.MD.7	3.MD.7 Relate area to the operations of multiplication and addition. 7a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. 7b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. 7c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a × b and a × c. Use area models to represent the distributive property in mathematical reasoning. 7d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	Keep			
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	3.MD.8	3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	Keep			
	3.MD.9	3.MD.9 Determine the value of a collection of money using dollar sign and decimal point appropriately. Understand that the digits to the right of the decimal represent parts of a whole dollar.	New		2	We added the money standard to make connections between grade levels.

Reason with shapes and their attributes.	3.G.1	3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	Keep			
Reason with shapes and their attributes.	3.G.2	3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and descrive the area of each part as 1/4 of the area of a shape.	Keep			